



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

Fax Cover Sheet

Date: 05 Aug 2003

T : Roy Roberts	From: David E Graybill
Application/Control Number: 09/785,194	Art Unit: 2827
Fax No.: 703 979 7429	Phone No.: 703-308-2947
Voice No.: 703-979-5700	Return Fax No.: 703-305-3431
Re:	CC:
<input type="checkbox"/> Urgent <input type="checkbox"/> For Review <input type="checkbox"/> For Comment <input type="checkbox"/> For Reply <input checked="" type="checkbox"/> Per Your Request	

Comments:

Information disclosure statement filed 7-7-3.

Number of pages 7 **including this page**

STATEMENT OF CONFIDENTIALITY

This facsimile transmission is an Official U.S. Government document which may contain information which is privileged and confidential. It is intended only for use of the recipient named above. If you are not the intended recipient, any dissemination, distribution or copying of this document is strictly prohibited. If this document is received in error, you are requested to immediately notify the sender at the above indicated telephone number and return the entire document in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450



PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 6

Complete if Known

Application Number	09/785,194
Filing Date	February 20, 2001
First Named Inventor	Shinji TAKEDA
Art Unit	
Examiner Name	GRAYBILL, D.
Attorney Docket Number	TM&K0006

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
G	A	US- 4,358,581	11-09-1982	Sutton	
	B	US- 4,581,096	04-08-1986	Sato	
	C	US- 4,656,238	04-07-1987	Kunimune et al.	
	D	US- 4,875,279	10-24-1989	Sakiadis	
	E	US- 4,933,219	06-12-1990	Sakumoto et al.	
	F	US- 4,965,331	10-23-1990	Jackson et al.	
	G	US- 4,985,105	01-15-1991	Masuda	
	H	US- 5,145,099	09-08-1992	Wood et al.	
	I	US- 5,177,032	01-05-1993	Fogal et al.	
	J	US- 5,204,399	04-20-1993	Edelman	
	K	US- 5,234,522	08-10-1993	Suzuki et al.	
	L	US- 5,238,730	08-24-1993	Hanawa et al.	
	M	US- 5,250,637	10-05-1993	Shiobara et al.	
	N	US- 5,296,567	03-22-1994	Baumann et al.	
	O	US- 5,319,005	06-07-1994	Hagiwara et al.	
	P	US- 5,360,942	11-01-1994	Hoffman et al.	
	Q	US- 5,432,380	07-11-1995	Jin et al.	
	R	US- 5,476,908	12-19-1995	Kishi et al.	
		US-			

FOREIGN PATENT DOCUMENTS

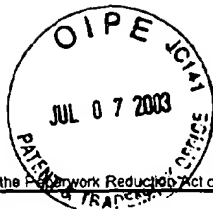
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
G	S	EP-0271736-A1	06-22-1988	Nippon Steel Chemical Co.		
	T	EP-0837498-A1	04-22-1998	Hitachi Chemical Co.		
	U	JP-3215014	09-20-1991	Seiko Instr.		
	V	JP-02-256251	10-17-1990	MATSUSHITA		
	W	JP-06-326240	11-25-1994	Hitachi Cable Co.		

Examiner Signature	<i>Shinji</i>	Date Considered	7-27-3
--------------------	---------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (04-03)

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 6**Complete if Known**

Application Number	09/785,194
Filing Date	February 20, 2001
First Named Inventor	Shinji TAKEDA
Art Unit	
Examiner Name	GRAYBILL, D.
Attorney Docket Number	TM&K0006

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
H	X	US- 5,512,628	04-30-1996	Sakumoto et al.	
	Y	US- 5,528,075	06-18-1996	Burns	
	Z	US- 5,635,009	06-03-1997	Kawamura et al.	
	AA	US- 5,659,004	08-19-1997	Takigawa et al.	
	AB	US- 5,728,473	03-17-1998	Inoue et al.	
	AC	US- 5,739,099	04-14-1998	Welch et al.	
	AD	US- 5,827,908	10-27-1998	Arai et al.	
	AE	US- 5,837,368	11-17-1998	Hiroe et al.	
	AF	US- 6,046,072	04-04-2000	Matsuura et al.	
	AG	US- 6,099,678	08-08-2000	Kotato et al.	
G	AH	US- 6,201,945	03-13-2000	Schlueter, Jr. et al	
	AI	US- 6,248,613	06-19-2001	Matsuura et al.	
	AJ	US- 6,372,080	04-16-2002	Matsuura et al.	
	AK	US- 2001/0015484-A1	08-23-2001	Matsuura et al.	
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
H	AL	JP-1-165635	11-20-1989	NEC Corp		
	AM	JP-3-228	01-07-1991	HITACHI CABLE		
	AN	JP-5-125337	05-21-1993	SUMITOMO BAKELI		
	AO	JP-5-152386	06-18-1993	SUMITOMO METAL		
	AP	JP-5-152466	06-18-1993	SHIN ETSU CHEM		
G	AQ	JP-5-335379	12-17-1993	TORAY IND INC		

Examiner Signature	Date Considered
	7-27-3

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (04-03)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	4	of	6
-------	---	----	---

Complete if Known

Application Number	09/785,194
Filing Date	February 20, 2001
First Named Inventor	Shinji TAKEDA
Art Unit	
Examiner Name	GRAYBILL, D.
Attorney Docket Number	TM&K0006

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ² -Number ⁴ -Kind Code ⁶ (if known)	MM-DD-YYYY		
Q	AX	JP-54-12266	01-29-1979	MITSUBISHI ELEC	
	AY	JP-62-141038	09-05-1987	Irokawa	
	AZ	JP-64-19735	06-12-1990	Tomeogawa Paper	
	BA	JP-64-22744	02-06-1989	Kansai NEC Corp.	
Q	BB	JP-7-90239	04-04-1995	SUMITOMO BAKELITE	

Examiner Signature	<i>[Signature]</i>	Date Considered	7-27-3
-----------------------	--------------------	--------------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	09/785,194
		Filing Date	February 20, 2001
		First Named Inventor	Shinji TAKEDA
		Art Unit	
		Examiner Name	GRAYBILL, D.
Sheet 5	of 6	Attorney Docket Number	TM&K0006

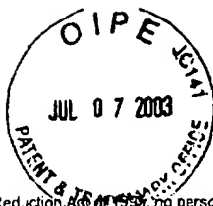
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
G	BC	"Rubber Elastomer Utility Notes", relates to types of rubber and their chemical structure and properties, July 20, 1991	
	BD	Notice of Reason for Refusal Japanese for Appln. No. 2000-346979 mailed on 10/22/2002 together with English Translation	✓
	BE	Opposition against Japanese Patent No. 3187400	
	BF	Opposition against Japanese Patent No. 3215014	
	BG	European Search Report dated July 8, 2002 (mailed July 15, 2002)	
	BH	Notice of Reason for Refusal for Japanese Appln. No. 7-173493 mailed on August 29, 2000 together with English Translation	✓
	BI	European Search Report dated March 24, 2003 (mailed March 31, 2003) in European Application 03001585.3	
	BJ	Opposition against Japanese Patent No. 3117966	
	BK	Property list, Plastic Reader (1987 15th edition)	
G	BL	International Search Report dated March 12, 1996 (mailed April 2, 1996) for International Application PCT/JP95/02691	

Examiner Signature		Date Considered	7-27-3
--------------------	--	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08B (04-03)
Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	09/785,194
		Filing Date	February 20, 2001
		First Named Inventor	Shinji TAKEDA
		Art Unit	
		Examiner Name	GRAYBILL, D.
Sheet 6	of 6	Attorney Docket Number	TM&K0006

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CA	BM	Notice of Reason for Refusal for Japanese Patent Application 2000-156125	✓
CA	BN	European Search Report dated October 28, 1998 in European Application EP96922225 (Mailed December 10, 1998)	

Examiner Signature		Date Considered	7-27-03
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.99. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.